

EasyOCR

Optical character recognition library



At a Glance

- Teachable character recognition for the most reliable and fastest recognition
- · Invariant to character size
- Tolerant to poorly printed, broken characters
- "Connected" characters separation
- Pre-defined fonts included

Benefits

New in Open eVision 24.02

EasyFind: Significant speed increase, without any loss of accuracy.

Easylmage

- New Gabor filtering function to help with texture analysis and edge detection.
- New inverse circle warp function, providing conversion between polar and cartesian coordinates.

Easy: Improved off-screen rendering on all platforms.

Admin: Simplified version upgrade procedure with version numbers removed from filenames.

Open eVision Studio: Evaluation, prototyping and development tool

Open eVision Studio is the evaluation, prototyping and development tool of Open eVision. Its intuitive graphical user interface allows you to call and immediately see the result of any of eVision's 2D image processing functions. A scripting functionality generates the corresponding code, which can then be copied and pasted into your application.

Open eVision Studio is free (when using Open eVision 2.0 and above) and does not require any license.

Just click on DOWNLOAD OPEN EVISION STUDIO and install Open eVision. Sample images, manuals and sample programs are included.

EasyOCR Description

EasyOCR is a font-dependent printed character reader based on a template matching algorithm. It has been designed to read any kind of short text (part numbers, serial numbers, expiry dates, manufacturing dates, lot codes,...) printed on labels or directly on parts.

New in Open eVision 23.12

Import of standard datasets into Deep Learning Studio

- Import of COCO Json dataset for EasyLocate or EasySegment Supervised
- Import of YOLO TXT annotations for EasyLocate
- Import of Pascal VOC XML annotations for EasyLocate

EasySpotDetector (Beta release, contact us for more information)

- A single API and license for the alignment of region of interest, surface defect detection (particles, scratches,...) and classification with a custom trained Deep Learning classifier.
- Realtime processing for inline surface inspection

Training

EasyOCR requires training the font to be recognized. It is able to learn from sample images all possible characters to be read. This makes the recognition extremely flexible, fast and reliable.

The training phase involves an interactive application used to show samples of the characters and allow the library to learn and store them in a font file. Moreover, EasyOCR provides the means for you to write your own, custom, font editor. EasyOCR also comes with three standard pre-learnt font files for the standard OCR-A, OCR-B and Semi fonts.

Neo Licensing System

- Neo is the new Licensing System of Euresys. It is reliable, state-of-the-art, and is now available to store Open eVision and eGrabber licenses.
- Neo allows you to choose where to activate your licenses, either on a Neo Dongle or in a Neo Software Container. You buy a license, you decide later.
- Neo Dongles offer a sturdy hardware and provide the flexibility to be transferred from a computer to another.
- Neo Software Containers do not need any dedicated hardware, and instead are linked to the computer on which they have been activated.
- Neo ships with its own, dedicated, Neo License Manager, which comes in two flavours: an intuitive, easy to use, Graphical User Interface and a Command Line Interface that allows for easy automation of Neo licensing procedures.

All Open eVision libraries are available for Windows and Linux

- Microsoft Windows 11, 10, 8.1, 7 for x86-64 (64-bit) processor architecture
- Linux for x86-64 (64-bit) and ARMv8-A (64-bit) processor architectures with a glibc version greater or equal to 2.18

Applications

Machine Vision for the General Manufacturing Industries

Product identification for traceability

Machine Vision for the Printing Industry

Label and packaging inspection: Inspection of the quality of the printing of characters and codes

Specifications

Software

| Software | |
|----------------------------|--|
| Host PC Operating System | Open eVision is a set of 64-bit libraries that require an Intel compatible processor with the SSE4 instruction set or an ARMv8-A compatible processor. |
| | Open eVision can be used on the following operating systems: |
| | Microsoft Windows 11, 10, 8.1, 7 for x86-64 (64-bit) processor architecture |
| | Linux for x86-64 (64-bit) and ARMv8-A (64-bit) processor architectures with a glibc version greater or equal to 2.18 |
| | Remote connections |
| | Remote connections are allowed using remote desktop, TeamViewer or any other similar software. |
| | Virtual machines |
| | Virtual machines are supported. Microsoft Hyper-V, Oracle VirtualBox and libvirt hypervisors have been successfully tested. |
| | Only the Neo Licensing System is compatible with virtualization. |
| | Minimum requirements: |
| | 2 GB RAM to run an Open eVision application |
| | 8 GB RAM to compile an Open eVision application |
| | Between 100 MB and 2 GB free hard disk space for libraries, depending on selected options. |
| APIs | Supported Integrated Development Environments and Programming Languages: |
| | Microsoft Visual Studio 2017 (C++, C#, VB .NET, C++/CLI) |
| | Microsoft Visual Studio 2019 (C++, C#, VB .NET, C++/CLI) |
| | Microsoft Visual Studio 2022 (C++, C#, VB .NET, C++/CLI) |
| | - QtCreator 4.15 with Qt 5.12 |
| Ordering Information | |
| Product code - Description | • 4005 - EasyOCR for USB dongle |
| | • 4055 - EasyOCR for PAR dongle |
| | • 4105 - EasyOCR for board licensing |
| | • 4155 - Open EasyOCR for USB dongle |
| | • 4205 - Open EasyOCR for PAR dongle |
| | • 4305 - Open eVision EasyOCR |
| Optional accessories | 6512 - eVision/Open eVision USB Dongle (empty) |
| | • 6513 - eVision/Open eVision Parallel Dongle (empty) |
| | • 6514 - Neo USB Dongle (empty) |



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